

Remarks

Claims 1-15 are pending in this application. Claims 1-9 and 12-15 have been rejected. Claims 10 and 11 are objected to. Applicants respectfully request reconsideration of the pending claims in view of the following remarks.

Drawings

The drawings have been objected to under 37 CFR § 1.83(a) because the Examiner asserts that every feature of the invention has not been shown. In particular, the Examiner asserts that the feature of a “third position intermediate to the first and second positions” recited in claim 2; the feature of “a spring for biasing the shuttle toward the first position” recited in claim 8; and the feature of “a carrier tray” recited in claim 11 must be shown in the drawings or canceled from the claims. Accordingly, Applicants submit herewith proposed Figures 3a and 5, and corrected Figures 2 and 2a showing these features identified by the Examiner. The proposed drawings are informal in nature, but Applicants will submit formal drawings and amend the specification accordingly in the event the proposed drawings are accepted by the Examiner and the application is found to be otherwise in condition for allowance. Textual support for the drawings is found, for example, on pages 3-5 of the specification and in original claim 2. Applicants respectfully submit that no new matter is added by the changes to the drawings.

§ 102 Rejections

Rejection of Claims 1, 3-5, 7, 9, 12-13, and 15

Claims 1, 3-5, 7, 9, 12-13, and 15 stand rejected under 35 USC § 102(b) as being anticipated by Ngoc-Xang Tran (FR 1496857). The Examiner asserts that all of the elements of these claims are disclosed by the Ngoc-Xang Tran reference. Applicants respectfully traverse this rejection.

Claim 1 of the present application is directed to a unitary dosing device that comprises a main chamber, a dosing chamber, and an unbiased shuttle adapted for movement between a first position and a second position. As explained on page 5, lines 3-5, of the specification, “unbiased” means that shuttle is not urged toward either the first or the second position. The device disclosed

by Ngoc-Xang Tran is dosing device adapted to be fitting on the neck of a bottle to assist a bartender in delivering an alcoholic beverage from the bottle into a glass for drinking. The Examiner asserts that the device depicted in Figs. 1 and 2 of the Ngoc-Xang Tran reference shows an unbiased shuttle 5 adapted for movement between a first position in which liquid can flow from the bottle (the main chamber) into the dosing chamber 2, and a second position in which the liquid exits the dosing chamber and is delivered into a glass 11.

Contrary to the Examiner's assertion, the shuttle 5 of the Ngoc-Xang Tran device is clearly biased towards a particular position. On the end of the shuttle 5 is a knob-like protrusion 8 that is designed to come into contact with the bottom of the glass 11, thereby forcing the shuttle 5 into a first position that allows fluid to enter the dosing chamber 2 from the bottle (see Fig. 1). As the bartender lifts the bottle the shuttle automatically moves downward under its own weight, thus shifting to the second position in which fluid is permitted to exit the dosing chamber 2 and enter the glass 11 (See Fig. 2). Thus, the shuttle 5 of the Ngoc-Xang Tran device is biased toward the second position, i.e. the position in which fluid is allowed to exit the dosing chamber 2 and enter the glass 11. Although the shuttle 5 can be forced into the first position, as show in Fig.1, by pressing down on the knob-like protrusion 8 at the end of the shuttle, the natural preference of the shuttle is to be in the second position. Consequently, the shuttle 5 depicted in Ngoc-Xang Tran is not an unbiased shuttle as recited in claim 1. This reference, therefore, fails to disclose all the elements recited in claim 1.

With respect to claim 3, Applicants point out that this claim recites that the "the activation location for the shuttle is disposed at an opposite end of the device from a dispensation location where the liquid exits the device." As explained above, the Ngoc-Xang Tran device is activated by pressing down on the knob-like protrusion 8. This protrusion is located at the same end of the device as the dispensation location 4. Ngoc-Xang Tran does not disclose a device in which the activation location is as the opposite end of the device from where the fluid exits the dosing chamber. This reference, therefore, fails to disclose all the elements recited in claim 3.

The other independent claim that stands rejected as anticipated by Ngoc-Xang Tran, i.e. claim 15, is directed to a method of providing a dosing device that comprises a main chamber, a dosing chamber, and an unbiased shuttle adapted for movement between a first position and a

second position. Since the device recited in claim 15 features an unbiased shuttle, this claim is likewise not anticipated by Ngoc-Xang Tran for the same reasons given above for claim 1.

Claims 4, 5, 7, 9, 12 and 13 are dependent claims that each add additional features to claim 1 or claim 3. Since claim 1 and claim 3 are not anticipated by Ngoc-Xang Tran for the reasons given above, claims 4, 5, 7, 9, 12 and 13 are likewise not anticipated by this reference.

The rejection of claims 1, 3-5, 7, 9, 12-13, and 15 under 35 USC § 102(b) as being anticipated by Ngoc-Xang Tran has been overcome and should be withdrawn.

Rejection of claims 1, 3-5, 7, 9-10, 12-13, and 15

Claims 1, 3-5, 7, 9-10, 12-13, and 15 stand rejected under 35 USC § 102(b) as being anticipated by Rasmussen (U.S. Patent No. 2,864,538). The Examiner asserts that all of the elements of these claims are disclosed by the Rasmussen reference. Applicants respectfully traverse this rejection.

Claims 1, 3 and 15 of the present application each recite that the dosing device comprises a shuttle adapted for movement between a first position and a second position. The Examiner asserts that the Rasmussen device also contains a shuttle, depicted as item 36 in Fig. 2, that is adapted for movement between a first position in which fluid can flow between the main chamber and the dosing chamber, and a second position in which fluid is permitted to exit the device. However, Applicants note that the connecting strip 36 depicted in Rasmussen is not a shuttle adapted for movement but rather is a stationary structure. The central portion of the Rasmussen device is not adapted for movement at all. Instead, the outer housing 26 is moved between a filling position and a dispensing position. Specifically, on Col. 3, lines 13-17, Rasmussen states:

The opposite ends of the housing are provided with tubular sleeves 28 and 30 respectively by which the housing 26 is slidably and sealingly received on the tube 18 for sliding movement between the filling stop 22 and the dispensing stop 24 on the tube.

Thus, in the Rasmussen device it is the entire dosing chamber itself, i.e. the housing 26, that is moved from a filling position to a dispensing position. The Rasmussen device, therefore, does

not need and does not contain a separate movable shuttle for transport of fluid within the dosing chamber.

Since Rasmussen fails to disclose a movable shuttle, this reference fails to disclose all of the elements of the claimed invention. The rejection of claims 1, 3-5, 7, 9-10, 12-13, and 15 under 35 USC § 102(b) as being anticipated by Rasmussen should, therefore, be withdrawn.

Rejection of claims 1-2, 4-5, 7, 9, 12-13, and 15.

Claims 1-2, 4-5, 7, 9, 12-13, and 15 stand rejected under 35 USC § 102(b) as being anticipated by Pritchett (U.S. Patent No. 4,807,785). The Examiner asserts that all of the elements of these claims are disclosed by the Pritchett reference. Applicants respectfully traverse this rejection.

Independent claims 1, 2, and 15 of the present invention recite dosing devices having a main chamber, a dosing chamber, and a shuttle adapted for movement between a first position and a second position. In the first position, the liquid can flow between the main chamber and the dosing chamber, but not out of the device. In the second position, the dosing chamber is sealed from the main chamber and liquid is permitted to exit the device. Claim 2 also recites that the device can be moved to a third position in which no liquid can flow between the dosing chamber and the main chamber and no liquid can escape from the device.

Pritchett discloses a bottle cap that can be used to dispense liquid from a container. As depicted in Fig. 2, the Pritchett device includes a container 1 from which fluid can flow into a cylinder 2. A tube 7, within the chamber can be moved to so as to align apertures 12 and 14 and allow fluid in the cylinder 2 to exit the device. When apertures 12 and 14 are aligned, the top portion 9 of tube 7 seals the cylinder 2 from the container 1. However, the Pritchett device contains another aperture 17, which allows fluid from the dosing chamber to flow back into the container, even when the tube 7 is fully depressed into the dispensing position. Specifically, Pritchett states that "opening 17 is shown to cap wall 2 and which allows over flow liquid to flow back to container 1." (Col. 2, lines 29-33). Pritchett explains that hole 17 "serves as a 'pressure reliever' so that liquid flows through said hole and back into the container 1 if excess liquid is in the chamber defined by the cap main cylinder." (Col. 2, line 66 to Col. 3, line 2).

Since the Pritchett device contains an opening for allowing liquid to flow back into the container, even when cap is in the dispensing position, Pritchett does not disclose a second position in which “the dosing chamber is sealed from the main chamber” as is recited in claims 1, 2 and 15. For the same reason, Pritchett also fails to describe a third position in which “no liquid can flow between the dosing chamber and main chamber” as is recited in claim 2. Regardless of the position of the tube 7, the opening 17 will always allow for some liquid to flow back into the container. The dosing chamber and the container are never completely sealed off from each other in the Pritchett device.

Since Pritchett fails to disclose all of the elements of claims 1, 2 and 15, these claims are not anticipated by this reference.

Claims 4-5, 7, 9, 12 and 13 are dependent claims that each add additional features to claim 1 or claim 2. Since claim 1 and claim 2 are not anticipated by Pritchett for the reasons given above, claims 4, 5, 7, 9, 12 and 13 are likewise not anticipated by this reference.

§ 103 Rejections

Rejection of claims 6 and 14

Claims 6 and 14 stands rejected under 35 USC § 103(a) as being unpatentable over Rasmussen (U.S. Patent No. 2,864,538) or Ngoc-Xang TRAN (FR 1496857) or Pritchett (U.S. Patent No. 4,807,785) in view of Aperlo (U.S. Patent No. 3,738,543). The Examiner asserts that Rasmussen, Ngoc-Xang Tran, and Pritchett each describe all of the features of the invention, except the inclusion of a volumetric spacer within a dosing chamber. The Examiner relies on Aperlo to compensate for this deficiency, asserting that Aperlo teaches the use of a volumetric device within a dosing chamber. The Examiner concludes that it would have been obvious to one of ordinary skill in the art to incorporate a volumetric spacer into the dosing chambers of the devices described in the primary references to obtain the invention recited in claims 6 and 14. Applicants respectfully traverse this rejection.

For the reasons set forth in detail above, Rasmussen, Ngoc-Xang Tran, and Pritchett do not describe all of the features of the claimed invention. Thus, even if, as the Examiner has asserted, it would have been obvious to incorporate a volumetric spacer into the Rasmussen, Ngoc-Xang Tran, and Pritchett devices, this combination of references still fails to provide all of

the elements of the claimed invention. The rejection of claims 6 and 14 under 35 USC § 103(a) should, therefore, be withdrawn.

Rejection of claim 8

Claims 8 stands rejected under 35 USC § 103(a) as being unpatentable over Rasmussen (U.S. Patent No. 2,864,538) or Pritchett (U.S. Patent No. 4,807,785) in view of Ludwig (U.S. Patent No. 2,366,343). The Examiner asserts that Rasmussen and Pritchett each describe all of the features of the invention, except the inclusion of a spring for biasing the shuttle toward the first position. The Examiner relies on Ludwig to compensate for this deficiency, asserting that Ludwig teaches the use of a spring for biasing a shuttle toward the filling position. The Examiner concludes that it would have been obvious to one of ordinary skill in the art to incorporate a spring into the devices described in Rasmussen and Pritchett to obtain the invention recited in claim 8. Applicants respectfully traverse this rejection.

For the reasons set forth in detail above, Rasmussen and Pritchett do not describe all of the features of the claimed invention. Thus, even if, as the Examiner has asserted, it would have been obvious to incorporate a spring into the Rasmussen and Pritchett devices, this combination of references still fails to teach or suggest all of the elements of the claimed invention. The rejection of claim 8 under 35 USC § 103(a) should, therefore, be withdrawn.

Claim Objection

The Examiner has indicated that claims 10 and 11 are allowable but have been objected to as being dependent on a rejected base claim. For the reasons provided above, Applicants submit that the base claims are patentable over the cited references and the rejection of these base claims should be withdrawn. Thus the objection of claims 10 and 11 should likewise be withdrawn.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Reconsideration of the application is requested.

All communications in this case should be direct to the undersigned. If the Examiner believes a telephone discussion would be helpful to resolve any of the outstanding issue in this case, the Examiner is encouraged to call the undersigned at the number listed below.

Respectfully submitted,

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